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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,538	06/05/2001	Rajankikant Jonnalagadda	H0001839	5236

7590 08/26/2002

Larry J. Palguta  
Honeywell Law Department  
3520 Westmoor Street  
South Bend, IN 46628

EXAMINER
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LEO, LEONARD R

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 08/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/874,538

Applicant(s)

JONNALAGADDA ET AL.

Examiner

Leonard R. Leo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8, 11-14 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 11-14, 16-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 19 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

The amendment filed June 12, 2002 has been entered. Claims 7, 9-10 and 15 are cancelled, claims 1-6, 8, 11-14 and 16-21 are pending.

#### ***Claim Objections***

Claims 19 and 21 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Regarding claim 19, the recitation of a "turbine assembly inlet" does not further limit the "heat exchanger assembly."

Regarding claim 21, the recitation of "operatively connecting said heat exchanger assembly to an inlet of a turbine assembly ..." does not further limit the "method of controlling a fluid flow for a heat exchanger assembly."

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Halleck. Regarding claims 3-4, 11 and 13, the slots 17-18 are believed to be rectangular, since Figure 3 does not depict any variations in cross-section. Regarding claims 6 and 14, the slots 17-18 of Halleck are believed sized to permit a suitable flow of air to be cooled by the coolant.

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Claims 1-6, 8, 11-14, 16-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Maniscalco. Regarding claims 6 and 14, the isolation and flow direction control plates 10 of Maniscalco are believed sized to permit a suitable flow of exhaust gas to heat the air.

Claims 1-4, 6, 8 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Harper. Regarding claims 6 and 14, the slot 38 of Harper is believed sized to permit a suitable flow of hydraulic fluid to be cooled by the air.

### *Response to Arguments*

The rejections in view of Agate, Walker and Pfluger et al are withdrawn.

Applicants' remarks with respect to Maniscalco are mistaken. Maniscalco (Figure 2) discloses shell side fluid inlet 14 arranged in a cross flow fluid path with respect to tube side inlet 28 and outlet 29. Furthermore, Maniscalco (Figure 3) discloses the isolation and flow direction control plates 10 have a plurality of slots 12. The rightmost plate 10 is located "adjacent" the outlet 15.

Applicants' remarks with respect to Harper are mistaken. Harper (Figure 2) discloses shell side fluid inlet 20 is arranged in a cross flow fluid path with respect to tube side inlet and outlet (i.e. left to right in Figure 3).

Applicants' remarks with respect to Halleck are not commensurate in scope with the claims. The claims do not recite the orientation of the flow paths of the tube side fluid with respect to the shell side fluid. The claims merely recite the orientation between the "tube side inlet and outlet" and the "shell side inlet and outlet." As demonstrated by the prior art of record, the inlets and outlets have little to do with the heat exchange relationship between the working fluids. Halleck (Figure 1) discloses shell side fluid inlet 14 arranged in a cross flow fluid path

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with respect to tube side inlet 28 and outlet 29. Furthermore, Halleck (Figure 3) discloses the isolation and flow direction control plates 10 have a plurality of slots 12. The rightmost plate 10 is located "adjacent" the outlet 15.


***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648.

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.

  
**Leonard Leo**  
**Primary Examiner**